REMARKS

This application was filed with fifteen claims. Claims 1-3 and 14 have been rejected. Claims 10-13 have been withdrawn. Claims 1, 2, 4, 8, and 15 have been amended. Therefore, Claims 1-9 and 14-15 are pending in the Application. Reconsideration of the application based on the remaining claims as amended and arguments submitted below is respectfully requested.

Claim Objections

Claims 2, 8, and 15 have been objected to because of certain informalities. In response, Applicant has amended Claim 2 to refer to a "liquid passage" and Claim 8 to refer to a "liquid chamber". Claim 15 has been amended to be in independent form including the limitations of original Claim 14.

Claim Rejections - 35 U.S.C. § 102(b)

Claims 1 and 2 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Czarnecki (U.S. Patent No. 2,041,906). In response, Applicant has amended Claim 1 to more clearly distinguish Applicant's invention from that of Czarnecki. In particular, Czarnecki discloses a filter 24 positioned between the lower chamber opening and the chamber 23. This filters the liquid before it can pass through the lower chamber opening (port 16). However, the liquid enters the device at ports 11 or 12 where it can contact the seal area proximate the upper chamber opening. Thus, contaminants in the liquid can contact tip 33 and bushing 31 without having passed through filter 24. In Applicant's invention of Claim 1, as amended, the filter assembly includes a liquid sealing element that seals an upper

portion of the filter assembly so that contaminants in the liquid cannot enter the seal area at the upper chamber opening. One embodiment of this liquid sealing element is shown on Fig. 6 and is described on page 12, lines 7-13 as including an annular cap 25. Czarnecki's filter is obviously intended only to prevent contaminants from exiting the valve. The structure and operation of the filter in Czarnecki is not intended to prevent contaminants in the liquid from contacting and damaging the seals at the upper end of the chamber and valve stem. Therefore, Claim 1 as amended is not anticipated by Czarnecki.

With respect to Claim 2, as amended, Czarnecki does not disclose a cylindrical lower section of the filter that provides a sealing engagement with a vertically extending upper portion of the valve seat. One embodiment of this feature is shown on Fig. 6 and described on page 12, lines 2-5. (Filter 13 and upper portion 47 of seat 21). First, the filter 24 is shown and described by Czarnecki to be simply a "strainer." (Col. 2, lines 8-12). A strainer cannot provide a sealing engagement. Second, no vertically extending upper portion of the valve seat is shown by Czarnecki. Rather, the bottom edge of the filter 24 is shown to be flush against a horizontal surface of the valve seat. Thus, Claim 2 defines a device that is not anticipated by Czarnecki.

Claim 14 has been rejected under 35 U.S.C. § 102(b) as being anticipated by Lewis et al. (U.S. Patent No. 5,873,528) and Trumbull et al. (U.S. Patent No. 3,160,331). Applicant respectfully traverses this rejection because neither Trumbull et al. nor Lewis et al. teach a seal assembly contained in a housing so that the seal

assembly can be removed as a unit from the valve. One embodiment of this structure is shown on Applicant's Fig. 7 and described on page 12, lines 14-19 (housing 33 and liquid seal 12). With respect to Lewis et al., the Office Action identifies components 58 and 68 (Fig. 1) as the seal assembly, with component 68 being the housing. However, Lewis at al. describes component 68 as a "washer" (col. 5, line 47). Moreover, Fig. 1 shows washer 68 as simply covering the seal 58 whereas Claim 14 requires a "housing" with an "internal bore surrounding and retaining the liquid seal." The internal bore of the washer 68 in Lewis et al. neither surrounds nor retains the seal 58. Thus, the seal 58 and washer 68 of Lewis et al. must be removed as discrete components, and not as a unit as specified in Claim 14.

Similarly, the Office Action identifies elements 46, 58, and 60 (Fig. 2) as a seal assembly in Trumbull et al., with element 46 being the housing. Trumbull et al. describes element 46 as a "piston" having an axial bore. (Col. 2, line 53) Elements 58 and 60 are described as O-ring seals to seal the ends of the piston. (Col. 2, lines 60-63). Note, however, that the internal bore of the "housing" (piston 46) neither surrounds nor retains seals 58, 60. (See Fig. 1 of Trumbull et al.) There also is no teaching of removing piston 46 and seals 58, 60 as a single unit. No structure exists in Trumbull et al. for this to occur.

Therefore, Applicant respectfully submits that the rejection of Claim 14 under 35 U.S.C. § 102(b) should be withdrawn.

Claim Rejections - 35 U.S.C. § 103

Claim 3 has been rejected under 35 U.S.C. § 103 as being unpatentable over Czarnecki in view of Palmer (U.S. Patent No. 3,053,419). As discussed above with respect to the rejection of Claim 2, Czarnecki does not disclose a filter having a liquid sealing element at the top portion of the filter assembly, providing a sealing engagement for the seal area at the top of the liquid chamber. Thus, the Czarnecki design cannot prevent damage to the seals proximate the upper end of the valve stem caused by contaminants in the liquid, including contaminants (e.g., char) generated internal to the valve. This problem is solved by the design characterized by Applicant's Claim 1, as amended. Palmer does not disclose this limitation. Therefore, the combination of Czarnecki and Palmer do not teach the invention of Claim 3, as dependent on amended Claim 1.

Allowable Subject Matter

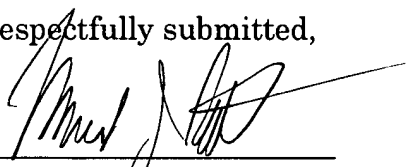
Claims 4-9 have been objected to as being dependent on a rejected base claim but were noted to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, Claim 4 has been rewritten in independent form to include all of the limitations of original Claims 1-3. Claims 5-9 are dependent (directly or indirectly) on Claim 4. Claim 15 has been rewritten in independent form to include all of the limitations of original Claim 14 Therefore, Claims 4-9 and 15 should be allowable.

Applicant has commented on some of the distinctions between the cited references and the claims to facilitate a better understanding of the present invention.

This discussion is not exhaustive of the facets of the invention, and Applicant hereby reserves the right to present additional distinctions as appropriate. Furthermore, while these remarks may employ shortened, more specific, or variant descriptions of some of the claim language, Applicant respectfully notes that these remarks are not to be used to create implied limitations in the claims and only the actual wording of the claims should be considered against these references.

The Commissioner is authorized to charge any deficiency or credit any overpayment associated with the filing of this Response to Deposit Account 23-0035.

Respectfully submitted,



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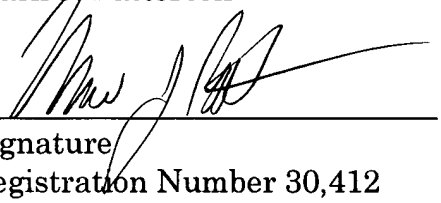

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